

**IN THE DRAWINGS**

Figure 1 has been amended as shown on the Replacement Sheet attached hereto.

## REMARKS

In the Office Action dated July 22, 2006, claims 1-4 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lemelson in view of Koch. This rejection is respectfully traversed for the following reasons.

The Examiner stated that the Lemelson reference discloses a catheter with electromagnets along a length of the catheter, however, the language of claim 1 of the present application does not merely require a plurality of magnets disposed along a length of a catheter, but requires a plurality of separated, *independently controllable* electromagnets disposed along the catheter body. This is for the purpose of giving the electromagnets respectively different magnetic moments. The electromagnets disclosed in the Lemelson reference are not individually controllable in this manner.

The only embodiment disclosed in the Lemelson patent that makes use of electromagnets is the embodiment shown in Figure 11 of that reference. As described in the paragraph beginning at column 13, line 60, that embodiment has a plurality of compartments formed in the walls of the catheter, which can contain ferromagnetic materials or strong magnets or wound electromagnets. Since the electromagnets are described as being an alternative to or equivalent of ferromagnetic materials or strong magnets, it is clear that the electromagnets are not individually controllable, but are simply operated to resemble permanent magnets. This is also made clear in the remainder of that paragraph which states that a patient who is to receive the catheter is placed inside a strong, *controllable* electromagnet. Therefore, it is clear that the catheter is steered by controlling the external

electromagnet, which generates a magnetic field that interacts with the ferromagnetic material, or the electromagnets, in the respective compartments of the catheter wall.

It is true that this passage further states, at column 14, lines 3-7, that if electromagnets are used in the catheter walls, only a desired part of the catheter length can be made responsible to the externally applied magnetic field, thus making it possible to selectively shape the catheter inside the patient. The meaning of this passage is not entirely clear, but at most it would be understood by a person of ordinary skill in the field of catheter design to mean that certain of the electromagnetic could simply not be activated, while other electromagnets are activated, so as to make only a portion of the catheter length responsive to control by the external magnetic field. Obviously, any electromagnet must be capable of being turned off or on, but this trivial feature does not represent a teaching or disclosure that the electromagnets in the catheter of the Lemelson reference are individual controllable in the manner disclosed in the present application.

To emphasize this point, independent claim 1 has been amended to claim a current supply connected to the electromagnets, which is for the purpose of providing the aforementioned individual control. Claim 1 also has been amended to make clear that this individual control is not merely turning the electromagnets on and off, but is for the purpose of giving the electromagnets to which current is supplied respectively different magnetic moments. Electromagnets with such individual control to give the respective current-supplied electromagnets different magnetic moments is not disclosed or suggested in the Lemelson reference.

Even though in the Lemelson catheter some electromagnets may be turned off at certain times, while others are activated, this is still not a disclosure to give

those different electromagnets respectively different magnetic moments. The turned off electromagnets simply have no magnetic moment at all associated therewith. A person of ordinary skill knowledgeable in the field of electromagnetism would not consider the non-activated electromagnets to have a magnetic moment of zero, whereas the activated electromagnets have a non-zero magnetic moment, because the non-activated electromagnets simply have no magnetic moment at all. Intentionally giving an electromagnet a magnetic moment of zero is something different from simply not turning an electromagnet on. Attributing a magnetic moment of zero to a non-activated electromagnet would be the same as saying that some object composed entirely of non-magnetic material has a magnetic moment of zero. One would not say, for example, that a pencil has a magnetic moment of zero; it is meaningless to ascribe any magnetic moment at all to such an object, and the same is true of a non-activated electromagnet.

Moreover, claim 1 states that it is the electromagnets to which a current is supplied that have the respectively different magnetic moments, thereby precluding a non-activated electromagnet from corresponding to the language of claim 1.

The Examiner relied on the Koch reference as teaching a catheter having magnet at its tip, since the Examiner acknowledged that the Lemelson et al reference does not explicitly disclose a catheter having a magnet at the tip thereof. For the above reasons, however, in view of the aforementioned discussion of the catheter disclosed in the Lemelson reference, even if that catheter were modified to provide it with a magnet at its tip, the subject matter of claim 1 still would not result.

Therefore, claim 1, nor any of claims 2, 3 and 4 depending therefrom, would have been obvious to a person of ordinary skill in the field of designing steerable catheters based on the teachings of Lemelson and Koch.

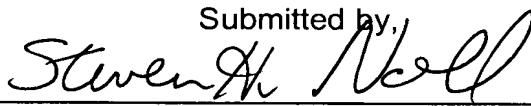
Editorial amendments have been made in claim 4 in view of the amendment to independent claim 1.

The amendments to independent claim 1 are supported in the specification as originally filed in the third paragraph at page 2, the third paragraph at page 3, the paragraph bridging pages 3 and 4, and the first full paragraph at page 4.

In order to comply with the requirements of 37 C.F.R. §1.83(a), a current supply designated with reference numeral 2 has been added in Figure 1, and the current supply that was already disclosed in the specification as originally filed has been identified with this reference numeral 2 as well. In view of the disclosure of the current supply in the original specification, no new matter is added thereby.

All claims of the application are submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,



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